24 OCT 96

Office of the Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 239
Washington, D.C. 20054

Dear Sir or Madam:

Please accept and file on record, my original document and nine copies for the Commissioners of FCC, in regards to Comments on Section 255 of the Telecommunications Act of 1996.

Thank you very much.

Sincerely,

Jo Waldron

Jo Waldron

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List ABCDE

24 OCT 96

Dear FCC Commissioner's:

Please find my attached Comments In the Matter of "Implementation of Section 255 of the Telecommunications Act of 1996. Access to Telecommunications Services, Telecommunications Equipment, and Customer Premises Equipment By Persons with Disabilities. WT Docket No. 96-198."

In regards to my Comments, I have written them in such a way as to offer education and facts surrounding the reality of American's with Disabilities and the current access to telecommunications and communications, as well as to offer the reality of the population segments themselves.

It is my belief that one must understand both of these components before one can really look at what must be compliatory or what must not be compliatory under Section 255.

I offer this with the expertise of my complete background, experience, and constant interaction with American's with disabilities, the telecommunications industry, the communications industry, the American's with Disabilities Act, and the realities of the corporate arena.

If I may be of further help to you, please do not hesitate to contact me at 719-392-1442. I stand ready to assist in any manner that you may need.

Thank you in advance for all your time spent on this matter, it truly will ensure freedom of communications for millions of American's who have not been able to participate in this realm to date.

Sincerely,

Jo Waldron

Jo Waldron
Disabled American for the Nation, since 1987.

FCC

In the Matter of)
)
Implementation of Section 255 of the)
Telecommunications Act of 1996)
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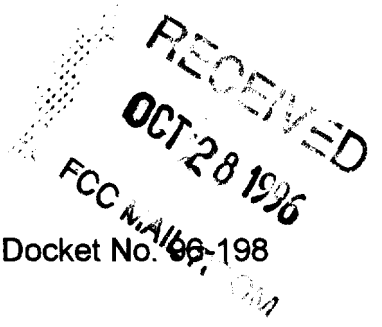
Access to Telecommunications Services,)
Telecommunications Equipment, and)
Customer Premises Equipment)
By Persons with Disabilities)



WT Docket No. 96-198

NOTICE OF INQUIRY

PUBLIC COMMENTS OF JO WALDRON

I respectfully submit my comments on the aforementioned NOI, on behalf of extensive knowledge about not only the telecommunications industries, and the assisting devices arena, but also on the population of American's with Disabilities (due to interaction at over 900 speaking engagements as Disabled American for the Nation, since 1987), and for myself, as a person who is totally off-the-chart deaf and with multi-disabilities.

First of all, allow me to provide the accuracy in numbers of American's with Disabilities. According to the U. S. Dept. of Commerce, Division of Census, in the last census, the numbers reflected of 60 million American's with Disabilities, with a thirteen year documented yearly growth of almost 4 million people per year.

In regards to people with hearing disabilities, the census documented over 30 million American's with hearing disabilities, this did not include those American's over the age of 65. According to AARP, over 80% of this population has hearing disabilities, generally that of degenerative hearing loss. Thus, those American's with hearing loss exceed 54 million people.

The collective numbers are probably not totally accurate, but they are the best and most realistic numbers I have come across in years. I feel the numbers are tremendously greater.

Thus, one must note that in regards to American's with hearing disabilities and the impact of Section 255, one would see an approximate low end growth of:

Year 2000	64+ million
Year 2002	68+ million
Year 2003	70+ million
Year 2005	74+ million
Year 2007	78+ million
Year 2008	80+ million

Now, if one looks at the numbers of American's who wear hearing aids today, one can literally make up any number. This is due to the bottom line fact that no one has any type of accurate numbers. I prefer to go by the best arena, that of knowing that the International Hearing Aid Society reflects that in the United States, for the past 15 years, over 2+ million hearing aids per year have been sold. Now, even considering attrition of hearing aid wearers out of this figure, one can only assume that it would still leave a most sizable population of hearing aid users.

This I believe establishes the largess of the population of American's with disabilities that will be most directly affected by Section 255.

Now, the reality is those with mild to moderate level hearing loss constitutes approximately ten per cent of the population. Today, that would reflect 5.4 million out of 54 million people with hearing disabilities.

This leaves 48.6 million people who have moderate severe, severe, profound, deaf, and off-the-chart hearing loss.

According to one entity which represents TDD/Relay services and solutions, by the year 2000, they project there will be almost ONE million relay/TDD users in the United States. Today, that figure is approximately one half million users.

Taking one half million TDD/Relay users from the balance of 48.6 million people with moderate severe downward hearing loss, RESULTS IN 48.1 MILLION AMERICAN'S THAT DO NOT BENEFIT FROM TELECOMMUNICATIONS IN THIS NATION, TODAY.

Thus, hearing loss is the largest population, within a population of American's with Disabilities.

This is why Section 255 is of such great importance to the population. Simply put, "We wish to participate in American Society, not relegated to the role of Spectators." In the interest of placing the technical arena into bottom line layman's language, I would offer just what the technical performance is of assisting listening devices.

1. Several Brands of neck loops 11 ohms.
   (Is used for mild to moderate hearing loss levels. Requires t-coil in hearing aid.)

2. Several Brands of Hearing Aid Compatible phones 17.41 ohms.
   (Is used by mild to moderate hearing loss levels. Requires t-coil in hearing aid.)

3. Many Brands of Volume Control Handsets and Adapters 32.6 ohms.
   (Allows a 18 to 30db gain. Used by mild to moderate hearing loss levels.)

4. Standard Silhouette 56.12 ohms.
   (Poor induction, high failure rate, poor performance, used by mild to moderate hearing loss levels.)

5. HATIS Systems 110.3 ohms.
   (Used by all hearing loss levels, requires t-coil in aid, HATIS compensates for low t-coil performance. Gain of up to 143db through hearing aid. Universal applications to telecommunications and electronics.)

**This information is also supported by numerous tests that were performed by NYNEX/Bell Atlantic, Nortel, and numerous other telecommunications firms.

Due to the complication of not only providing the needed amplification, but also the needed clarity of sound, I offer this information:

Distortion Graph Testing: AUDIOSCAN.

1. Neckloop/ComTek system at 500MHz 96% distortion

2. HATIS System/ComTek system at 1500 MHz 2% distortion

As you can visibly see the testing differences between the types of devices listed, not to mention the extreme shortfalls of performances. You can realize however, the importance of verification of the actual performances of assisting listening devices, and the equally important need for clarity. It is very simple, a device won't do much good if you can hear something, you just don't know what it is that you are hearing.

For further background, I would offer the following additional information:

According to the 1993 Telecoil (t-coil) Survey, regarding hearing aids that have telecoil as standard or as an option are:

Behind the ear (BTE) hearing aids	89%
In the ear (ITE) hearing aids	92%
In the canal (ITC) hearing aids	33%
Body Type hearing aids	100%
Cochlear Implant systems	33%
Induction Loop Receivers	100%

Additionally, please note T-coils are not new technology, they have been in hearing aids since the 1950's. The true point is, that until HATIS there really wasn't anything to benefit the usage of the t-coil, unless you had a mild or moderate hearing loss.

Also, please understand one doe not need to address the complexities ofd individual hearing loss, as the prescribed hearing aid (via and audiologist) already addresses this arena. One must just ensure that all hearing loss levels are addressed, including those who do not use hearing aids, thus the level of TDD/Relay service.

A universal requirement for the (poorly efficient) magnetic field (Hearing Aid compatible) in all handsets does not appear sensible. Providing the capability to use devices that work, for those that do need it, does make sense.

Today's HAC is poorly understood. HAC does not ensure communication. Many HAC phones are equipped with, or stationed near interference sources such as computer/video displays, florescent lights, and power supplies that defeat the ability to communicate (all one hears is the interference). Not to mention, with the new digital landline systems and transmissions one will see major problems with compatibility of HAC and for TDD's. They just don't work.

Kind of like the new digital televisions, a hearing aid on t-coil can pick up interference up to 12 feet away from the television set, almost the same as from a computer screen. On computers, note that multi-media computer screens do not interfere with the hearing aid.....why? They shielded the telecommunication wires (all three of them) for the transmit/receive audio path.

For what it is worth, HATIS eliminates the interference to the hearing aid on wireless phones, PCS phones, pay phones, landline phones, two-way radio's, televisions, radio's, etc.

Now, just so everyone understands, yes, my partner and I invented HATIS, but the reason we invented it was due to nothing being on the market that would allow me to

hear on the phones. I am deaf, with my hearing aid alone I can hear 8 sounds, that is it. In person, I communicate solely by lip reading. Yet with HATIS, I can use my wireless phone or landline phone and carry on an accurate voice conversation.

Thus, today HATIS is the key solution for hearing access. Guess it took a deaf person to design something to really solve the problems. So, I don't see my position as a conflict of interest, rather as a facilitator to enable other people like me to be able to do what I can now do.

I have also enclosed a copy of the APREL Report on the actual performance of the assisting listening devices, thus you can see for example, the performance of HAC and volume control is basically the same...so why have both?

I hope this background information will assist you as a FCC Commissioner in making your decisions in regards to Section 255, if I may be of further assistance on the overall picture, please do not hesitate to contact me.

Now, my comments on the NOI.

III. STATUTORY REQUIREMENTS

A. Coverage

1. Definition of "Telecommunications Service Provider"
   # 8.

From a point of clarity I would think that further clarification would be needed, otherwise FCC could face the reality of having to define it sooner or later, due to acceptance or non-acceptance of complaints.

Equally, one must consider the realm of telecommunications service in the near future, meaning that of the whole interactive phone, television, and computer arena. Example, the concept of telemedicine is one of the new venue's, so how does one with a hearing or sight disability participate in this.

One also can look at the Internet arena that involves sound, again you have an access issue. The solutions for both are relatively simple to implement, and it would be a matter of choices, i.e. customer premise equipment.

As with the realm that we faced with the ADA, I can assure you that if there are cracks, they will be found. Which is why 911 access for American's with disabilities is such a touchy subject. Which is also why wireless and 911 access is so very critical. Until landline industry catches up with the wireless industry on hearing access, this will be a

critical point. Example: Until pay phones are made accessible, approximately 48.1 million Americans can not use a pay phone, yet they can access 911 from a wireless phones or two-way radio's, with using the hearing access solutions.

2. Definition of "Telecommunications Equipment" and CPE
   # 9.

In regards to the treatment of equipment that can be used with telecommunications services and which also can be used with other services that do not fall within the statutory definition of telecommunications services, it is my belief that reason overall must prevail.

If wireless access is an issue, then the industry has six solutions for full access of every level of hearing access (the six solutions are described in detail in the communication plan presented to FCC from the Hearing Aid Summit). For sight access, several OEM's have already visited with me on what could be done. Obviously one has a tactile issue, and for example on a wireless phone, the tactile map could definitely improve by raising the number 5, the pound and number sign buttons, as well as power and send buttons. Then the memory could cover the end button and other features. This is being given serious consideration by the players.

Equally, I am working with OEM's for voice dialing, voice command, and wheelchair mounts for wireless phones, thereby addressing mobility and multi-disabilities.

Like I said, the solutions overall are pretty simple, and in my mind very easy to implement from a product standpoint.

What are the barriers? Antenna sights, a long shot, but maybe. Using phones on an airplane? Won't be by anyone who wears a hearing aid, due to interference of the plane engines and computer systems, this prohibits any benefit from JABRA, HAC, and HATIS as the interference to the hearing aid takes control. The in-flight movies are a waste too!

Again, one must take the Interactive venue into the overall picture here, are telecommunications a part of this, yes. Example: I can with HATIS, go from a landline phone, to a wireless phone, to a cordless phones (with retrofit), to cordless cellular, to a two-way radio, to a multi-media computer/and internet, to a radio, to a pay phone (with a retrofit), to a stereo, a CD Video Game System, a walkman cassette/radio, and more. All within a matter of seconds, and I can hear crystal clear on all of these.

Now, does this law give me the ability to do that, kind of. Does the network transmission allow me to do this, kind of. Does the OEM allow me to do this, kind of. Or is it the universality of a product, CPE that allows me to?

I believe that every manufacturer and every service provider has a responsibility to explore all avenues that would allow their products and services to benefit all people, if for no other reason, Economics. Most people do not know that between American's with disabilities and the elderly we control 60% of the DISPOSABLE Income in this nation! Equally, the census stated that a mere 31.9 million American's with disabilities control over $789 BILLION dollars of revenue a year.

Now, after working with the wireless industry for over four years, I know they are motivated to do what is necessary. Which is why the solutions are already at hand. This will become self-evident in the next few months, with all the advertising/promotion campaigns that the wireless industry players are getting ready to launch, reflecting all six solutions for all levels of hearing access.
The landline side of the house is a whole different story, they are totally unreceptive to making the changes necessary to have their products and services accessible. I even have one letter from a top executive from a major player who stated, "We have TDD and relay that is all we are interested in doing for those KINDS of people."
Draw your own conclusions, trust me, I certainly did.

Future technology is also a consideration in the CPE/Tele Equip realm, point blank, some things will not be accessible no matter what is tried or done. Does this mean that they shouldn't be made, not in my book.

Again, an issue of reason. I personally don't expect anything and everything to be accessible to me. If there is a way to make a future product or service accessible and it is ignored or the thought of "maybe we don't have to prove we can't do it", then there is a real problem.

I believe I speak for a lot of people with disabilities when I say, "I don't want special treatment, just the same opportunities as anyone else." Kind of like the buzz words, "Level the playing field." Heck, we just want to get onto the playing field!

10.
I think you have the same responses here as I stated above in # 9. With the additional impact of digital landline telecommunications systems on HAC and TDD's. Not to mention, the interference problems with landline phones and the transmission. I get tired of listening to "Radio Ministry" while I am on the phone talking to someone! But hey, I can hear!

Are there solutions to the above problem, yes. Shielding.

3. Manufacturers Subject to Section 255.

11.

In the access arena, I really don't think you will find a tremendous difference in usage, example: HATIS is being used in Europe, France, Sweden, Brazil, South America, Germany, England, Canada, and numerous other countries. Not only is the HATIS landline systems in use in these countries, but so are the HATIS Cellular systems with analog, digital, and PCS wireless phones and their transmissions.

How much work did this require? For Motorola, less than 24 hours, for NOKIA, less than two hours. Obviously, not a high level of difficulty.

So, in giving weight to different standards , I don't think this has tremendous reactions that are not readily achievable. The flip side for access for example is: Worldwide there are over 200 million people with hearing disabilities, if they buy a phone, why can't they have the benefit of hearing access in countries all over the world?

The United States has NOT done a real great job of ensuring hearing access for its own people, think what a tremendous step it would be to create access here and abroad.

I remember when the Russian delegation of people with disabilities came to a President's Committee meeting, their biggest frustration was the same as ours (American's with hearing disabilities) they couldn't access the telephones which impacted their everyday living and getting jobs. This was less than five years ago.

12.

Personally, as a business person these are issues that have "Parent" responsibilities. Meaning that communication must be clear for access to any and all component manufacturers, hence equal responsibility.

Example: I can license HATIS to be built inside of a pay phone handset or emergency road phone handset, do I have a responsibility? In my mind, I most certainly do.

In regards to license arena, again that is "Parent" to the agreement at hand. Kind of like the vendor responsibility arena of the ADA. One should not be offered a cloak to hide behind or use. Hence, for secondary manufacturers or resellers, they should have the same responsibility for access of products and services, same as ADA. There's life after interconnection?!

B. Requirements.

1. Definition of "Disability"

13 and # 14.

On # 13. The reason that "Functional Limitation" was included in 255 is real simple. I guess you could hold me on that one. The reasoning is due to the pre-conceived concepts of people without disabilities and their interpretation of what people with disabilities need for access.

Example: I am deaf, so landline industry tells me that they have volume control handsets, they have HAC phones, great. I wear a hearing aid, suppose to work, right? I can't hear anything with these two devices on a phone. They don't address my functional limitation of my disability, or 90% of people with hearing loss for that matter. Then they tell me they have TDD/Relay, okay, it meets my functional limitation, it doesn't meet my CPE of choice. Which is why that is also in 255.

One can consider visual. Okay, voice dialing may be the godsend and the choice of many people who are blind, there again some (including those who are not blind but visually disabled) may prefer just a tactile map of the number pad on the phone and want to dial there own number. Again, functional limitations and choices.

Now, considering what we went through in the ADA definition of disability and the application thereof, I can not recommend strongly enough that you go by the ADA definitions and applications. Bottom line is there are over 914 different disabilities, and all the combinations thereof, trust me, you don't want to get into this.

Thus, leave it as we did in the ADA; is, record of, and regarded. Recognizing that the functional limitation of the heavily populated portions of disability representation falls under exactly what is in 255, that of hearing, vision movement, manipulation, speech, or interpretation of information.

2. Definition of "Readily Achievable"
   a. ADA Definition.
   # 15. and 16.

My belief here is that you should maintain this as so laid out in the ADA, recognizing that the ADA carried the phrase "as new technology becomes available, it is thus considered to be held to the same level of responsibility as expressed in the act."

How can this be communicated, everyone I know of in the telecom industry is well aware of FCC and its web site and its FCC News. Thus, as the future technology becomes registered with FCC, so should the communication to the industry and to the general public occur. You wouldn't believe how many American's do not even know a volume control handset is available, and it has been around for over 30 years!

This goes back to the "Parent" concept of responsibility and the economic reality of benefits for accessible products and services. It is and should be an ongoing standard to achieving access for products and services, current and future, otherwise one reaches the shutdown mode, thus the shut OUT mode.

b. Costs; Financial Resources
   # 17.

From a direct business perspective with the wireless industry and HATIS accessibility to their products and services, I offer the following responses:

First off for wireless hand-held phones (includes cordless cellular application as well), the cost for HATIS access is minimal. If the phone has the 2.5 mm jack as used for the ear-bud hands-free system, then it is done.

Meaning, all you have to do is plug HATIS cellular system into the jack and off you go. Currently, there are over 110 hand-held cellular phones that work just fine this way.

Equally, for the transportable phones, it requires us to install a 3.5mm jack on the handset, plug in HATIS and off you go.

For the PCS phones, it requires a boot adapter for the phones, with a 2.5mm jack, plug in HATIS and off you go. (This boot adapter is the very same that is used for fax or computer access, so it is already available, they just added the jack.)
So far, almost every PCS phone is already HATIS accessible or the adapter almost completed. The point is they are all being made accessible!

CTIA has already made it a requirement for CTIA phone certification that the phones must have the 2.5mm jack for hearing access. Thus, the wireless side costs were very minimal if any.

On the landline side, at least in regards to HATIS, there are no costs as the HATIS landline box plugs directly into the phone receiver cord jack.

The costs for pay phones and emergency road phones (also for cordless phones, cordless cellular already has the 2.5mm jack) requires either a retrofit of $60 cost or a license agreement for building HATIS inside the handset of the pay/emergency phones. Since this has not happened yet, I can't give a cost analysis, however, it stands to reason that not only would it be more practical to put HATIS inside the pay/emergency phones, but probably a lot more cost effective. We can install by hand in less than five minutes, so it is not a high level of difficulty.

One must also consider that the functionality of volume control's (they really are for hearing people in a noisy environment), and the HAC perform one and the same, thus benefiting 10% per cent of the population! Please note the letter on this subject from Dr. Pam Ball.

In regards to computers, well those that are not multi-media require 17 cents worth of shielded wires to eliminate the buzzing interference with hearing aids (this is rather impactive if a job requires the usage of a computer and a phone at the same time).

In regards to multi-media computers, at least in regards to HATIS, you simply plug it in, and off you go.

In regards to computer access, the IBM Center for People with Disabilities is an excellent resource (much better than Apple Computers division for people with disabilities), with printed guides for access as so stated for disabilities under 255, which gives you sort of the whole picture (they still haven't caught onto the interference/hearing aid issue), rather than me creating a whole manual here.

#18.
Point blank, make it mandatory compliance as so stated in 255 and under "readily achievable" of ADA/255. Then the issue becomes one of clarifying the gray areas. Example: A multi-billion dollar company doesn't want to spend $10,000 to make a product line accessible, okay now how do you justify? Hence, clarity of the gray area.

19.

Yes. Just like the ADA, otherwise you will have the old subsidiary or stand alone buy off of responsibilities. Again, gray areas of needed clarity.

20.

Going back to what I expressed earlier in this document (see Manufacturers and service providers responsibility, including for external market countries) I would think America would very much like to lay claim to its leadership for access. We are so sorely behind every other country. Example: Europe and Canada ruled that all hearing aids made or sold in their respective countries must have t-coils in them. Sweden is the most progressive country in the world for people with disabilities. Canada is far more progressive through their government for the benefit of people with disabilities.

So, why doesn't America lead for once, on behalf of all people with disabilities around the world!

3. Definition of "Accessible to" and "Usable By"
21.

The DOJ, the ATBCB, and the FCC need to cross reference the ADA guidelines of accessible placement, and then the FCC must enforce the access of products and their design, and services delivered to people with disabilities.

Otherwise, you will have loopholes bigger than Dallas. Example: Person who has CP (cerebral palsy) who is in a wheelchair, thus needs to access a pay phone of the appropriate height as so deemed by ADA. Cool, but what about the predominant secondary disability of CP, that of hearing loss. If the pay phone is not equipped with hearing access solutions, then that person has physical access to the phone, but can not use the phone due to lack of hearing access.

22.

Allow me to give yet another example. Take the wireless phone, which has access for all levels of hearing loss, take vibra-ring option or vibrating batteries so that the individual knows when the phone rings, take the tactile map of the keypad which creates access for visually disabled, take voice dialing which creates access for mobility and visually disabled, take wheelchair mounted wireless phone and a individual with a mouth stick which creates access for CP, quadriplegic, stroke, etc. individuals, take speech relay (a specially trained person for interpretation of individuals with impaired speech) which creates access for another group,.....I can play with this example forever.

As you can see, through a combination of manufacturing and service provider roles the end result is telecommunication access for the majority of people with disabilities.

I can create the same type of lengthy examples for computer or television interaction. Which by the way, all benefit not only people with disabilities, but those who are learning English, people using the electronics, but don't want the sound to bother another or wake up the baby, roommate in a hospital or a school dorm, and the list goes on.

Now, does there need to be a lift off hook? I don't think so. The element of "readily achievable" will already come into play, thus if a product or service can be made accessible then I believe that it should indeed be required to do so. Then the only problem becomes one of the industry gaining the unbiased input as to what is needed and just what solves the problem.

Reminds me of the payphone TDD fiasco. A major player was dismayed at the lack of usage of their $110 million dollar project of payphone TDD's. So, I told them why. Deaf person would go to the phone, put their money in, dial the number, wait to hear a

code, punch it in, and the TDD keyboard would then be released for use. BRILLIANT, they expected us to hear for 20 seconds to hear the code to punch in! You haven't lived until you have watched 4,000+ deaf people signing and laughing at a phone! Thus, they had to go back and make all the necessary changes!

23.

Well, this is a large arena. Please consider the following assessment of accessible products and services for telecommunications. (Please do refer to the beginning background of this document for true access by American's with hearing disabilities.)

Hearing Loss: There are numerous assisting listening devices including JABRA, plus HAC and volume control that benefit those with mild to moderate hearing loss.

There is obviously HATIS for all levels of hearing loss. (Available for over a year). This for wireless, landline, PCS, cordless, cordless cellular, two-way radios, pay phones, multi-media computers, televisions, radio, etc.

There is TDD and relay service for deaf and non-hearing aid users.

There is devices for lights which will flash for alert when the landline phone rings.

There is vibrating devices or options for wireless phones for alert when the phone rings.

There are people that you can beg to make a phone call for you.

Several companies have tried to R & D assisting devices, including built into the phone, but without success.

Now, if that is all that is available, that tells you how much the services are being taking advantage of. Personally, I didn't know anything about long distance service until almost 4 years ago, didn't really have a need for the 40 years prior to that!

The bottom line here is , the assisting device industry is a $600 BILLION a year industry. Personally, other than writing off all the purchases of devices that don't work (and God Forbid they should refund your money), simple math of $600 billion and 60+ million people with disabilities just doesn't compute!

Vision Loss:

Tactile map keyboards are available. There was talk of doing Braille keypad, however

since Braille is not universal (even though a movement has been trying to accomplish this for year, alas no success to date), and less than 10% of people who are blind know Braille, seems rather redundant when compared with improving the tactile map keyboards.

Voice dialing is available. Including via computer, which is also beneficial to mobility disabled as well.

I have already covered the tactile map improvements that several of the wireless OEM's are attempting.

There you have it, with the current state of access, most visually disabled individuals can access telecommunication services.

Mobility loss: (movement and manipulation)

Overall, this part of the population probably has the greatest arena of access products and services. A few examples range from a mouth stick, breath tube, speaker phones, voice dialing, infrared head range directive access equipment, computer mouse key, software programs, and the list goes on.

Speech loss:

There are the programs that I have already mentioned, such as speech relay, equally the use of TDD and relay is evident here as well.

Through computers and telecommunications there is hardware and software that allow for telecommunication and communication.

Interpretation of Information:

My interpretation of the arena specifically applies to those who are learning disabled, stroke survivors, developmentally delayed, and mentally challenged, etc.

In regards to processing, it has been determined that retention climbs tremendously when the information is presented in both visual and audio format simultaneously. Thus, there are devices and computer hardware and software that create this environment.

An organization called RESNA, as well as JAN (Job Accommodation Network) are two excellent resources for target specific examples of what is currently available, no matter what the disability or the combination thereof. Doesn't mean there are solutions for all,

just means that they usually have the latest and greatest of what is available.

The bottom line is the portion of the population that will have the greatest impact of 255 and the benefits thereof, is that of hearing loss. Makes sense, doesn't it.

4. Compatibility.

24. and 25.

Existing peripheral devices and specialized CPE's:

Hearing loss: Landline: Volume control handsets (18 db gain), dual volume control handsets (takes db gain to around 30db), HAC (check APREL Report, same performance as volume control handsets), volume control boxes, volume control phones with volume control in base of phone; neck loops and silhouettes to plug into speaker phones, and speaker phones all this to benefit those with mild to moderate hearing loss.

Please bear in mind the problems with digital landline transmission and HAC and TDD's. I am concerned as to the pay phone TDD's on digital transmission, as well.

HATIS Landline systems for all levels of hearing loss, via their hearing aid with t-coil. Analog or digital transmission application with no buzzing interference.

TDD's for the deaf and non-hearing aid users. Includes pay phone TDD's.

Flashing lights for alert of phone ringing.

Wireless phones: standard volume control (this is of higher amplification than landline phones), volume control option (raises amplification to about 30 db), JABRA which allows deep canal amplification, all of these applies for those with mild to moderate hearing loss.

HAC: Refer to APREL Testing for Ericsson, and the scientific proof dictates that HAC inside of a wireless phone is only applicable for mild hearing loss. As with a very low powered hearing aid, one will not experience interference, even with an analog phone.

However, with a hearing aid addressing most moderate hearing losses or more, one will most likely experience the interference on wireless phones, no matter what the transmission used is. Thus the proven need of at least six inches distance between the hearing aid and the wireless phone.

Now, if HAC has been proven to not out perform that of the level attained by volume control or volume control option, then I even more so question the validity thereof.

HATIS cellular systems (includes HATIS Hands-Free Cellular System): Used by all levels of hearing loss, via hearing aid with t-coil. Equally, eliminates the interference of all types of transmission, including PCS. (Please refer to the HATIS application/access sheets included at the end of this document.)

Compact, portable TDD's and relay service.

For the rest of the devices and CPE's please refer back to 3., # 23.
As well, due to the large amount of information here, it might be wise to request full documentation per specific disability area. I do warn you, it will be large.

As to the definitive of "Commonly Used," this is somewhat of a gray area. My view would be that the definition needs to be somewhat closed as to give the industry a fighting chance at knowing what they are required to have available, yet giving enough choices as to address the majority of the needs of the specific target representation within the population of people with disabilities.

As with hearing disabilities, the solutions are readily available to address every level of hearing loss, thereby guaranteeing access to telecommunications and communications. The wireless industry has through verified testing and pilot programs (AT & T Wireless did this in six cities) has embraced the current solutions, and have documented proof of the acceptance by the participants with disabilities. The landline industry has not really progressed in any area of solutions or compliance, at least in my opinion.

This venue of pilot programs or verified testing, along with Part 68 arena of FCC, may be the most effective means of recognizing new technology, thus the arena of "Commonly used" becomes one of verified choices, meeting the needs of the largest portion of the targeted disabilities.

Time frame on this, boy I don't know. I know with HATIS we have worked very closely with the wireless industry for over five years, and we really are just getting ready to launch with HATIS. The people who have HATIS, and are aware of being able to use wireless phones with HATIS, everyone of them qualifies "Commonly Used." What about the rest of the population that could benefit from HATIS, well that won't happen until they know first and foremost that hearing access indeed exists with wireless phones, let alone landline phones. Please understand that this is not HATIS specific, rather all six solutions for hearing access and wireless phones. The points on HATIS that are made, is simply because I have file after file of documentation to back up all

that I say.

Quite frankly, I am very much of the opinion that wireless is landline solution for compliance. Example: I still can't use pay phones, I can't use the phones in hospitals, I can't use the phones in the majority of hotels, and the list goes on. Note, this is not referencing one hotel or hospital or pay phone, it is every one, in every facility, in every city, all across the nation. Yet, I can use my wireless phone and HATIS and make a phone call from anywhere, and at anytime. Rather makes the point for emergency access and safety doesn't it.

Which is why another area of concern is the wireless phone rental places across the country, be it from a dispensing machine, or the front desk at a hotel. People with disabilities deserve the same access for the same reasons that non-disabled people would participate in the renting of a wireless phone.

The only other issue's I can see are in regards to interference is that of digital landline systems, computers, and digital television. The rest of it, we should be able to live with, i.e., interference from florescent lights, microwaves, security systems, etc.

Contrary to the thinking of hearing aid manufacturer's, the wireless industry is not responsible for fixing our world. I realize that the hearing aid can only be manufactured in certain ways (although I think they are erroneous in thinking everyone just wants the smallest hearing aid that can be made, rather I think the point of how well they work is really the need), however with an industry that charges a 4,000% MARK-UP, you would think they would have some manufacturing standards. At I stated before, they do in numerous other countries in the world.

I believe that many solutions are available for all the target segments, I question whether it is realistic to think that every level within can be so addressed. With the creation of the solution lists addressing the majority of disabilities, then the remainder would obviously fall under the issue of "case-by-case" basis. As with the ADA, the best solutions for this area falls back on the person with the disability.

The end result should be one of solutions, that the industry is required to have readily available upon request by the person with a disability. Otherwise the point of comparative of a non-disabled person having direct and quick access to telecommunications and communications, and the person with a disability does not. I don't believe in knowing the population as well as I do, that this would bode well for anyone.

C. Network Features, Functions, and Capabilities.
26. & 27.

This is an interesting arena, as one must consider the whole future interactive television, telephone, and computer applications. I don't believe that the intent of the Super Information Highway is to have 60+ million American's with disabilities take a detour.

Thus, if through other sections of the Telecom Act gives rights for telecommunications or communications industry to interact and offer services via network services, internet or on-line services, telemedicine, traffic control services, or anything else, I believe that ALL American's have the right of birth to participate in what is offered to general society.

Thus, a rule of thumb should be one of, what is available to one, should be available and accessible to all. Otherwise, the histrionics of this nation shall reflect once again the arenas of exclusion.

Example: The ClassLink programs to wire America's schools to the Information Highway, is this to be only for non-disabled children? It is a known fact that 67% of children in America's schools have disabilities, with an annual growth rate of 13% per year. Guess which disability is the largest. Yes, hearing disabilities.

Palmer Wireless and my company are working together on a ClassLink program at Falcon School in Georgia, Mr. Ryan, CEO of Palmer Wireless personally funded this program, as his requirement was that the majority of the class be hearing disabled, the children are ALL having a ball. No one is excluded.

They are also doing a program of ClassLink at the Georgia School for the Blind and Deaf, with all children accessing the wireless phones and the laptop computers. So, solutions are so readily available. I might add that the reason the children with hearing disabilities can participate is due to using HATIS for the wireless phones and for the laptop multi-media computers.

We are talking about profoundly deaf children here, think what this truly means for the future lives of children with disabilities. I was born deaf, believe me I know what difference it will truly mean.

IV. Implementation and Enforcement.

A. Resolution of Complaints.
29.

First of all, it is a given that equipment and services shall indeed overlap and converge. I have already given examples of this.

In my opinion the fairest means of guidelines is as I have already stated, listings of what the different solutions are per targeted disability population, benefiting the majority with each. The rest falls into the case-by-case basis.

My concern is industry will be paralyzed into non-action due to lack of clarity of just what they are suppose to do.

Kind of like some of the Executive reactions to the ADA. I will give you some examples of what was said by Executives/CEO's from the top Fortune 100 companies to me:

"What I am supposed to do, hire the handicapped? What am I suppose to do with them, use them as doorstops?!" OR,

"Gee, we wouldn't mind hiring the handicapped, but we have a corporate image to maintain, and we just can't do that if we are hiring freaks from society." OR,

"Hire the handicapped? Well, I don't know if we have any janitorial positions left open."

And the list could go on and on, and under any section of the Act. I have heard horror stories from one end of this nation to the other, as Disabled American.

This is the type of arena I would like to see prevented in Section 255. Thus, I would like FCC to indeed wield the big club that 255 gives you, to ensure that American's with disabilities can indeed participate in American society.

Without rules and guidelines of what constitutes compliance, I am afraid that many companies will do nothing, until the shoe drops via an informal or formal complaint, and then it is too late. The media as we all know will have a heyday in regards to the big, bad industry vs. the person with a disability who has been given yet another barrier. Doesn't bode well, does it.

Clearly the advantages to doing the listings of accessible solutions makes for a full picture for everyone involved. The FCC Disability Commission is an excellent resource for the listings as well. Ms. Linda Dubroof is not only a wonderful person, but knowledgeable as well. Listen to her. She knows when to stand her ground, and when to call in resources for answers.

As to the Access Board, I know of a lot of public dissatisfaction with the way they have handled issues and guidelines with the ADA. From what I can figure out, it appears to stem from too many personal agendas of the Access Board players. According to my sources in the population, its not that they have done such great wrongs, but it hasn't been done right either. Hence, I have not reacted to these allegations.

Probably the best bet for FCC is to review the guidelines presented by the Access Board, based on what I know, they clearly know that the bottom line is , it is truly up to FCC. Take what you believe to make sense and is supported, and review with Linda Dubroof. I will be happy to throw in my two bits, if requested to do so.

#30.

As to voluntary guidelines or a policy statement, well you might have some impact, I do question the end benefit to the population you are tasked with serving. Reminds me of the corporate side, any good HR person with good knowledge of the law, can get around employment law and cover it ten feet deep. I don't think this would mean much to any one, let alone from the FCC standpoint of having to deal with the complaints.

#31.

The guidelines should indeed cover the relationary responsibilities with converged services and equipment. This I would think would be critical to the successful management by FCC.

#32.

I would think that a standard of measure is mandatory for compliance. Reminds me of the Executive who went through the whole procedure to ensure that his bathrooms were ADA compliatory, and handicap accessible. He really did a beautiful job, he was really proud of his accomplishments. Only one problem, the bathrooms were on the second floor of the two story building.....no elevator, just stairs. Jeeezzzz.

Thus, Consultation with the disability community will either be real beneficial or a horrible experience. Depends on whether personal agendas can be put aside, and the true and whole picture looked at, or whether one is given only the narrow viewpoint.

Don't take me wrong, there are thousand's of fantastic people in this nation that would gladly serve, and should serve in this capacity. However, I would remind people that upon the passage of the ADA, thousand's of people became self proclaimed experts on the ADA. Their only qualification for this expertise was that they had a disability, not that they knew the intent, spirit, or specifics of the law.

As I have stated, we don't need another "Lawyer's Revenue Bill."

Again, the beauty of pilot programs and verifiable documentation of what the attempts and intents really are by the industry, do indeed give a defensible position.

#33.

No to all suggestions. You are opening Pandora's box.

#34.

Not a bad concept, but I think the targeted solution listing is a better way to go. With the addition of "As new technology is available arena."

B. Developing Equipment and CPE Guidelines in Conjunction With the Access Board.

#35.

In this realm, my belief is settled with "Exclusive Jurisdiction" by FCC, as so granted in the Act. Again, take what makes sense from the Access Board recommendations, utilize the listing concept, and yes, it should apply to both equipment and service industries. I would also encourage the "Parent" responsibility concept.

As to guidance rules, I think , actually I pray that the general public does not become totally aware of the rights granted under Section 255 until guidance rules are in place.

Once the public becomes aware that they could file a informal or formal complaint with FCC TODAY, and action comes accordingly...I think you are looking at some major activity from the population. What would be the defense? That the Chief General Counsels or legal department of the largest companies in the world in the telecommunications industry didn't know 255 existed? So, why aren't they honoring the act requirements that were signed into law back in February? Weak, huh.

C. Complaint Procedures.

36.

I believe that FCC has a responsibility to first and foremost ensure under the fullest exercise of this Act, that American's with Disabilities have the tools and the opportunities to participate in telecommunications and communications in this nation.

I equally believe that if FCC does not embrace to the fullest exercise of this Act, then like other laws, it won't really benefit those from whence the protection or rights were intended for.

Given these beliefs, should you as a Commissioner of FCC, with the responsibility to the nation and its people, view this any differently, I am afraid the population will demand accountability.

A strong stand commands respect and understanding, a weak showing results in many avenues to get around something. In this case, it is access.

All American's should have the same rights, the question then becomes what will it take to ensure that they do. Exercise your full authority here, that will certainly lessen the gray areas.

#37.

I would support special rules, which lay out step by step the procedural involved in filing a informal or a formal complaint. Be sure to ensure that it is easily understandable by all people.

I would support a procedural that allows for quick, efficient due process. If the areas are specific, i.e. targeted solution listings, etc., then that would narrow down the "Are they in compliance or are they not in compliance."

With this concept, then it would turn to "Do we want to be in compliance or do we NOT want to be in compliance."

It should be viewed as "How big is the hammer?" Or, "How much will it cost for non-compliance?" I hope you understand what I am reaching for here. That is all on this one for right now.

#38.

I believe this references the cliché' of, "six of one, half-a dozen of another," syndrome. Once the population becomes educated as to what rights have been granted to them under 255, my fear is that you will have major reactions thereof. I can only hope that the guidelines are in place by that time.

I would support interim rules, however they must address procedural allowing all people with disabilities the ability to react and the ability to file. Most importantly is what their rights really are, and are they entitled to file. This I do not believe is covered in the existing rules that FCC could take from.

#39.

Absolutely. In the ADA, for example: If a firm hires another firm to put on a seminar for them, and they hold the seminar in a hotel, then the bottom line "Parental" responsibilities falls back on the hiring firm, the hired firm, and the hotel to have the seminar and it's location to be accessible to people with disabilities.

As I have already shown in previous examples the direct converging between products and services in regards to people with disabilities, I simply do not see how 255 could not hold joint responsibility of manufacturers and service providers, when required.

Again, the vendor relationship section of the ADA. Specifically, service providers should not purchase equipment or CPE's that are not accessible as determined by 255 from the manufacturers. Otherwise, they are perpetuating that which is expressly prohibited by Section 255. Equally, the reverse can apply to selling manufactured products to service providers that do not provide accessible serves as determined by 255. One would think this would be a very effective arena.

Comparison of joint vs. separate reviews would be moot, based on the converging arena of both manufacturers and the service providers with the above arena.

As to both parties contributing to the inaccessibility, I would think that overall it would be 50-50 percent responsibilities. If only one party is responsible, then it becomes 100% responsibility.

Reminds me of a call I received on the emergency phones located every 10 miles on the freeways in California. The question was, "What happens if we make every other phone hearing accessible, what would that do to our liability?"

My response was, "Well, I guess that would reduce your liability by 50%!" Gives you an idea of just what the thought process or lack thereof really is.

As to fines, damages, or other penalties, I believe a wide range of options are available. I do know, having worked in corporate America for many years, that if the penalty is not large enough or severe enough to motivate compliance, then it won't happen. It is truly that simple.

A comparative is that of EEOC laws vs. OFCCP laws regarding employment and work practices. I know first hand that OFCCP laws and conciliatory arenas are far more impactive over the EEOC laws to a corporation.

Example: Non-compliance of a conciliatory agreement by a federal contractor can lead to loss of federal contracts, clearances, and fines. EEOC is possible fines, and punitive arenas. Needless to say, as to which has the bigger hammer.

I would support the arena comparable to the effect of OFCCP, there has been talk of FCC and seizure of equipment that is in non-compliance, may not be a bad idea taking it to that level, otherwise how much compliance can one reasonably expect from the industries.